

ABSTRACT OF THE DISCLOSURE

A communications system includes physical layer hardware and a processing unit. The physical layer hardware is adapted to communicate data over a communications channel in accordance with a plurality of control codes. The physical layer hardware is adapted to demodulate an incoming analog signal to generate a digital receive signal and modulate a digital transmit signal to generate an analog transmit signal. The processing unit is adapted to execute a privileged driver for interfacing with the physical layer hardware. The privileged driver includes program instructions for implementing a protocol layer to decode the digital receive signal, encode the digital transmit signal, and configure the physical layer hardware for receipt of the digital receive signal and transmission of the digital transmit signal based on the plurality of control codes. A method for configuring a transceiver includes demodulating an incoming analog signal to generate a digital receive signal based on a plurality of control codes; modulating a digital transmit signal to generate an analog transmit signal based on the control codes; and executing a privileged driver for configuring the plurality of control codes.